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Date: June 12, 2007

PLEASE DELIVER THE FOLLOWING FACSIMILE TRANSMISSION TO:

Name: C. Luke Gilligan

Company: USPTO

Fax No.: 571-273-8300

From: Patty Boss

Re: Serial No. 09/595,660

Pages: 49 (including cover sheet)

Message:
Mr. Gilligan:

We have faxed you a courtesy copy of the Second Supplemental Appeal Brief that we are filing in this case today. We sincerely hope it meets the requirements of 37 CFR 41.37. Due to the significant number of pages, the Exhibits have not been included in this fax. If you also wish to receive a copy of Exhibits A-G via facsimile, please contact me and I will forward them at once.

If there are any immediately apparent problems with the brief, please call John Monocello at (412) 543-1340. Mr. Monocello will follow-up with Examiner Pass next week as you instructed during your call with Mr. Monocello last month.

Patty Boss
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	
Teller et al.	
Serial No. 09/595,660	**SYSTEM FOR MONITORING HEALTH, WELLNESS AND FITNESS**
Filed: June 16, 2000	
Art Unit: 3626	
Patent Examiner: Natalie Pass	
Our Ref: 1148/015	

Mail Stop Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

June 12, 2007

SECOND SUPPLEMENTAL APPEAL BRIEF

Applicants submit the following Second Supplemental Appeal Brief in response to the Notice of Non-Compliant Appeal Brief of April 12, 2007 ("Notice"). This Supplemental Brief is the second supplement to Appeal Brief filed May 15, 2006, which was filed in response to the Final Office Action of March 13, 2006 ("Office Action"), which finally rejected claims 104-127, 137-152, 161-164, 167, 171, 172, and 175-182 of the above-referenced application. Applicants timely filed a Notice of Appeal on March 16, 2006.

In accordance with 37 C.F.R. 1.8(a), I hereby certify that I have a reasonable basis to expect that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope bearing sufficient postage and addressed to: Mail Stop Appeal Brief - Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on:

June 12, 2007
Date of Deposit

Patricia A. Boss
Name of Person Signing

Patricia A. Boss
Signature

I. Real Party in Interest

The real party and interest is BodyMedia, Inc. BodyMedia, Inc. is a Delaware corporation with a principal place of business of 4 Smithfield Street, 11th Floor, Pittsburgh, PA 15222. BodyMedia, Inc. is the assignee of the above-referenced patent application.

II. Related Appeals and Interferences

There are no appeals or interferences related to this application.

III. Status of Claims

Claims 1-103, 128-136, 153-160, 165, 166, 168-170, 173, and 174 have been cancelled. Thus, claims 104-127, 137-152, 161-164, 167, 171, 172, and 175-182 are pending in this application. The Examiner has rejected each of the above-pending claims, and the Applicants are appealing all the rejections.

IV. Status of Amendments

All amendments presented in the case have been entered.

V. Summary of the Claimed Subject Matter[1]

A. Brief Summary

The invention is a method to enable an individual to achieve an improved state of health. The invention monitors physiological parameters of the individual and obtains data related to the individual's life activities. The invention analyzes the physiological parameters and life-activities data in order to provide the individual with information regarding his or her progress toward a health-related goal. In this way, the invention provides actionable health-related suggestions and information to the individual.[2]

The claims subject to this appeal are directed toward an embodiment comprising a method for assisting an individual to monitor, control, and modify certain aspects of the individual's physiological status according to a preset physiological status goal (Specification, page 25, lines 11-17) while the individual is wearing a physiological monitoring device (Specification, page 7, lines 1-3).[3] The wearable physiological monitoring device generates parametric data of the individual and can be worn on the individual's body as part of an armband, form fitting shirt or the like. (Specification, page 7, lines 1-3). Examples of such parameters generated by the

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[1] The Summary of the Claimed Subject Matter begins with a summary explanation of the claims. At the end of the Summary the independent claims are reprinted with citations to the specification for each element.

[2] This Application has been routed to the e-commerce art unit 3626, which is a business methods patent examining unit. As will be shown herein, the invention is not a "business method" according to current parlance. To the extent that this application has been examined under a different set of internal standards or rules which the USPTO applies to "business methods", the Applicants respectfully submit that application of such rules is inappropriate.

[3] There are two independent claims in this application: claims 104 and 124. Claim 124 differs from claim 104 in that it recites a different "communicating" step, which will be discussed below. This discussion, therefore, incorporates the elements of both independent claims, and any dependent claims where necessary.

wearable device are the individual's heart rate, pulse rate, beat-to-beat heart variability, EKG or ECG, respiration rate, skin temperature, core body temperature, heat flow off the body, galvanic skin response ("GSR"), EMG, EEG, EOG, blood pressure, body fat, hydration level, activity level, oxygen consumption, glucose or blood sugar level, body position, pressure on muscles or bones, and UV radiation absorption. (Specification, page 7, lines 8-13).

One of the steps of the claimed method is to establish a physiological status goal according to certain physiological status parameters of said individual. (Specification, page 22, line 12 to page 23, line 17). In another step, the wearable device generates data indicative of a *first* parameter of said individual. The first parameter may be one of the parameters described in the preceding paragraph. In another claimed step, the method recites generating data indicative of a *second* parameter of said individual. The generation of the *second* parameter may be done by the wearable device (Specification, page 7, lines 8-13), or a second device. Second devices generating the data indicative of a second parameter could include, for example, a weight scale, iStat blood analyzer, blood pressure sensor, or a personal digital assistant with a sensing device incorporated therein. (Specification, page 14, lines 3-22). According to each independent claim, the first and second parameters are produced by at least one of said individual's body and the environment adjacent said individual's body (Specification, page 7, lines 8-20; Specification, page 10, line 5 to Specification, page 11, line 6).

The method also provides for receiving data related to the life activities of the individual, and generating individual status information relating to the individual from the life-activities data.[4] (Specification, page 15, lines 1-3; page 4, lines 3-5).

The invention also claims the step of *calculating*, from the *first and second parameters*, quantitative status information indicative of the relative degree of achievement of said individual's performance with relation to said physiological status goal. Note that the calculation requires *both* first and second parameters. Thus, the particular embodiment of the invention utilizes at least two parameters in the calculation of the quantitative status information. (See, e.g., Specification, page 29, lines 5-11; See also Table 2).

The method also provides for the communication of the calculated status information to a recipient. The claimed "communicating" can be done a number of ways, for example, through the web pages shown in Figures 5-11. (Specification page 24, lines 17-20). Claim 124 recites a different communicating step, which is as follows: communicating to a recipient said calculated quantitative status information *indicative of a suggested change in said individual's performance* to assist said individual in the achievement of said physiological status goal. (Specification, page 34, line 22 to page 35, line 9). Thus, the information communicated to the individual is meant to suggest to her that she modify her performance to reach her physiological status goal.

[4] This limitation is in independent claim 104 and claims depending therefrom only.

B. Direct Mapping of Independent Claim Elements to Specification[5]

A direct mapping of the elements of the independent claims to the specification is as follows:

> 104. (Rejected) A method for assisting an individual to monitor, control and modify certain aspects of the individual's physiological status according to a preset physiological status goal (Specification, page 25, lines 11-17), said individual wearing a wearable physiological monitoring device(Specification, page 7, lines 1-3)., the method comprising:
>
> establishing said physiological status goal according to certain physiological parameters of said individual; (Specification, page 22, line 12 to page 23, line 17)
>
> generating data with said wearable device, said generated data indicative of a first parameter of said individual wearing said wearable physiological monitoring device; (Specification, page 22, line 12 to page 23, line 17 and Table 1)
>
> generating data indicative of a second parameter of said individual with at least one of said wearable device and a second device; (Specification, page 7, lines 8-13, page 14, lines 3-22,and page 22, line 12 to page 23, line 17, and Table 1)
>
> receiving data related to the life activities of said individual; (Specification, page 15, lines 1-3; page 4, lines 3-5).
>
> calculating, from said first and second parameters, quantitative status information indicative of the relative degree of achievement of said

[5] Applicants have presented the Summary in two parts primarily in response to a Notice of Non-Compliant Brief issued by the Examiner on July 27, 2006. Specifically, the Examiner alleged that the Summary, which was identical to Part V(A) of this brief, failed to address each independent claim with a concise explanation of the subject matter of each independent claim. Applicants' respectfully disagree with the Examiner, since as can be seen from Section V(A) – there is, indeed, a concise explanation of the independent claims with reference to the specification for each claim element. Nevertheless, Applicants have chosen to reprint the claims and again cite the specification for the support of each element. While Applicants believe this measure is unnecessary and redundant, Applicants hope the redundancy will allow the case to proceed to the Board.

individual's performance with relation to said physiological status goal; . (See Specification, page 29, lines 5-11; See also Table 2)

generating individual status information relating to the status of said individual from said life activities data; (Specification, page 15, lines 1-3; page 4, lines 3-5). and

communicating to a recipient said calculated quantitative status information regarding said individual and said individual status information, (Specification page 24, lines 17-20).

wherein said first and second parameters are produced by at least one of said individual's body and the environment adjacent said individual's body. (Specification, page 7, lines 8-20; Specification, page 10, line 5 to Specification, page 11, line 6)

124. (Rejected) A method for assisting an individual to monitor, control and modify certain aspects of the individual's physiological status according to a preset physiological status goal (Specification, page 25, lines 11-17), said individual wearing a wearable physiological monitoring device (Specification, page 7, lines 1-3)., the method comprising:

establishing said physiological status goal according to certain physiological parameters of said individual; (Specification, page 22, line 12 to page 23, line 17)

generating data with said wearable device, said generated data indicative of a first parameter of said individual wearing said wearable physiological monitoring device; (Specification, page 22, line 12 to page 23, line 17 and Table 1)

generating data indicative of a second parameter of said individual with at least one of said wearable device and a second device;

(Specification, page 7, lines 8-13, page 14, lines 3-22,and page 22, line 12 to page 23, line 17, and Table 1)

calculating, directly from said first and second parameters, quantitative status information indicative of the relative degree of achievement of said individual's performance with relation to said physiological status goal; (See Specification, page 29, lines 5-11; See also Table 2)and

communicating to a recipient said calculated quantitative status information indicative of a suggested change in said individual's performance to assist said individual in the achievement of said physiological status goal, (Specification, page 34, line 22 to page 35, line 9)

wherein said first and second parameters are produced by at least one of said individual's body and the environment adjacent said individual's body. (Specification, page 7, lines 8-20; Specification, page 10, line 5 to Specification, page 11, line 6)

VI. Grounds of Rejection to Be Reviewed on Appeal

Applicants present the following concise statements of each of the grounds of rejections presented for review:

A. **Whether Mault et al., U.S. Pat. No 6,790,178 ("Mault") fail to anticipate claims 104-121, 124-127, 137-152, 161-64, 167, 171-172, and 175-182 the under 35 U.S.C. § 102(e); and**

B. **Whether Mault in view of Brown et al., U.S. Pat. No. 5,913,310 ("Brown") fail to render claims 122 and 123 obvious under 35 U.S.C §103.**

Applicants believe Mault fails on both of the above respects.

VII. Argument

A. Introduction

For nearly six years this application has been pending. Throughout this time, Applicants have presented argument after argument and amendment after amendment to distinguish the claimed invention from numerous references applied by the Examiner to reject the claims. Within the past several months, Applicants have had to contend with a new volley of references. Applicants have successfully distinguished the invention from each of these references, based upon concessions or admissions of the Examiners, but each time Applicants overcome a reference, the Examiner identifies another reference as a basis for rejection. For example, over the past several months, the Examiner agreed to withdraw U.S. Pat No. 5,951,300 to Brown ("Brown300"), which had previously been applied as a reference. (Interview Summary, July 12, 2005, attached hereto as Exhibit A). With agreement reached on Brown300, Applicants expected allowance; however, the Examiner then provided Applicants with three more references to consider: U.S. Pat. No. 6,808,473 to Hisano et al. ("Hisano"), U.S. Pat No. 5,730,140 to Fitch

("Fitch"), and U.S. Pat. No. 5,941,837 to Amano et al. ("Amano"). Hisano, as it turned out, was not prior art, and Fitch was deemed inapplicable. (See Amendment filed June 16, 2005, pp. 30-31, attached hereto as Exhibit B). With respect to Amano, Applicants spent a great deal of time, effort, and resources to distinguish the claimed invention from Amano in the two subsequent responses. (See Exhibit B, page 31; and Revised Amendment filed February 17, 2006, pp. 28-32, attached hereto as Exhibit C). After what appeared to be a productive interview with the Examiner and after submitting cogent arguments with respect to Amano in the February 17th Amendment, Applicants were again confident that allowance was imminent. Yet, as has been the unfortunate pattern in this examination, the Examiner discovered another reference and deemed Applicants arguments with respect to Amano "moot" in light of new grounds of rejection on the newly-discovered reference: U.S. Pat. No 6,790,178 to Mault ("Mault"). (See Office Action, attached hereto as Exhibit D). Frustratingly, the "newly-discovered" reference was not at all new, and should have been discovered a half of a year earlier because the Applicants submitted Mault as part of an Information Disclosure Statement in September 2005, six months before the final office action of March 13, 2006 and one month before the preceding final office action. (See IDS, September 13, 2005, attached hereto as Exhibit E). As discussed below, Mault is cumulative of the other references cited by the Examiner. Further, it does not support the rejections under 35 U.S.C. §§102 and 103.

B. Mault et al., U.S. Pat. No 6,790,178 ("Mault") fail to anticipate claims 104-121, 124-127, 137-152, 161-64, 167, 171-172, and 175-182 the under 35 U.S.C. § 102(e).

1. A brief description of Mault[6]

The invention in Mault is directed toward providing physiological sensing devices that communicate and are controlled by personal digital assistants ("PDAs"). Mault laments that the "stand-alone" nature of various physiological monitoring devices, including indirect calorimeters, EKG monitors, pedometers, body fat measuring devices and the like cause such devices to be "expensive and potentially bulky." (Mault, Col. 2, line 27). Mault's aim is to provide physiological monitoring equipment that could communicate with hand-held equipment, thus eliminating the need for expensive and bulky stand-alone devices. Mault's inventors also surmise that the ubiquity of personal computing devices ("PDAs") creates an opportunity to provide various physiological monitoring accessories to a broad base of users. (Mault, Col. 1, lines 46-49). According to Mault, the PDA could act as a control and display device for many different kinds of physiological monitoring accessories. (Mault, Col. 1, lines 50-54).

The claimed invention, however, differs from Mault in that it is not simply a method of configuring physiological monitors to communicate with PDA's. Further, the claimed invention is not simply a method of providing to a user his or her raw physiological parametric data. Rather, the claimed invention is concerned with providing actionable, analytical information to an individual regarding: (a) the individual's status relative to the individual's physiological goal, and/or (b) suggested changes in said individual's performance using a calculation involving two of the identified parameters.

2. Claims 104 -109, 147-149, 167, 175, 177, 179, and 181

[6] Applicants have attached Mault hereto as Exhibit F for the Board's convenience.

Claim 104 is the first of two independent claims in the application. Claim 104 contains patentable limitations separate from that of independent claim 124, as is discussed herein. Claims 105-109, 147-149, 167, 175, 177, 179, and 181 either directly or indirectly depend on representative claim 104 and, as such, contain all of the patentable limitations of claim 104 discussed below. Claim 104 recites a method comprising the following steps:

establishing said physiological status goal according to certain physiological parameters of said individual;

generating data with said wearable device, said generated data indicative of a first parameter of said individual wearing said wearable physiological monitoring device;

generating data indicative of a second parameter of said individual with at least one of said wearable device and a second device;

receiving data related to the life activities of said individual;

calculating, from said first and second parameters, quantitative status information indicative of the relative degree of achievement of said individual's performance with relation to said physiological status goal;

generating individual status information relating to the status of said individual from said life activities data; and

communicating to a recipient ***said calculated quantitative status information*** regarding said individual and said individual status information,

wherein said first and second parameters are produced by at least one of said individual's body and the environment adjacent said individual's body.

Applicants will focus their arguments on the bold and italicized elements above.[7]

Mault does not anticipate claim 104 because Mault does not disclose the claimed step of *calculating*, from said *first and second parameters*, quantitative status information *indicative of*

[7] By focusing their argument on the bolded and italicized claim limitations, the Applicants are not admitting that Mault anticipates the other claim limitations in claim 104.

the relative degree of achievement of said individual's performance with relation to said physiological status goal. In the Office Action (Exhibit D), the Examiner cites to Mault, Col. 6, line 61 to Col. 7, line 11 as anticipating this limitation. An excerpt of that cited section in Mault reads:

> The health management software may include the ability to set up a variety of fitness plans and to track adherence to the plans. For example, a particular user may specify that they will walk or run a certain number of times and for a certain distance each week. The software may then prompt the user to remind them that, according to the schedule, they should run or walk a certain distance on a particular day. The person uses a pedometer module, either on its own or mated with a PDA, to measure their performance during a run or walk. This data is transferred into the PDA and used by the software to determine how the person's performance compares with to their goals. (emphasis added).

Essentially, the above passage discloses software that sets up a fitness plan and prompts a user to adhere to the plan. The user is then able to measure a walk or a run with a pedometer. The software uses the pedometer data to determine if the user performed the scheduled exercise. If he did not, he is reminded to walk or run according to the schedule. Mault does not disclose any *quantitative status information indicative of the relative degree of achievement* as claimed. That is, there is no mention of degrees of achievement, there are only reminders to run or walk according to a schedule. Moreover, no matter what kind of information results from Mault, i.e., a prompt or a reminder, the information is not *calculated* from *two parameters* produced by the individual's body or the environment adjacent to the body as claimed. Mault simply discloses the

use of one parameter to determine whether a reminder should be sent to the user to complete a scheduled exercise.[8]

In the remainder of the Mault passages cited by the Examiner, Mault goes on to disclose that it "may be preferable to track other factors such as blood pressure, heart rate, or blood glucose" as part of the fitness and management program. (See Mault, Col. 7, lines 6-8). But Mault does not disclose performing any operation, including the claimed *calculation*, on these tracked parameters. There is other similarly deficient disclosure in the Mault reference. For example, Mault discloses a pedometer module in which data from only one parameter, the pedometer, is used to make an approximation of running distance, running speed, and other exercise factors. (See Mault, Col. 11, lines 60-63). Mault also discloses that various exercise parameters calories burned can be calculated from one parameter, the pedometer data (See Mault, Col. 12, lines 14-23). To the extent that Mault discloses the utilization of two parameters, Mault only discloses a second parameter as an alternative, or as an additional parameter that would be "useful" to record. (See Mault, Col. 20, lines 7-11). Mault does not disclose the combined use of the parameters in a calculation which results in *quantitative status information indicative of the relative degree of achievement* as claimed. ((See Mault, Col. 13, lines 31-40) (disclosing the use of a second parameter, calorimeter data, to calibrate a pedometer)).

[8] Applicants made this same argument to the Examiner in a previous office action, albeit with respect to the Amano reference. (See Exhibits B and C). This supports Applicants' contention that Mault merely discloses providing status information from one parameter, which is cumulative of the prior art previously cited in this examination by both the Examiner and Applicants. Applicants have previously overcome a reference, i.e., Amano, which discloses some sort of status information resulting from one parameter. (See Exhibits B and C). Indeed, Applicants have submitted other references in their Information Disclosure Statement that disclose providing status information based on one parameter. Notably, Applicants submitted the Mault reference in an Information Disclosure Statement in September 2005 (Exhibit E), one month before the office action prior to the one being appealed. As such, Mault is cumulative. It adds nothing new to the Examination, except for more cost and delay for the Applicants.

Accordingly, the rejection of claim 104 is overcome and reversal of the rejections of claims 104-109, 147-149, 167, 175, 177, 179, and 181 is respectfully requested.

3. Claims 110 – 114, 117-119, 171, and 177

Claim 110, and its dependent claims 111-114 and 117-119, 171, and 177 directly or indirectly depend from independent claim 104. Claims 171 and 177 do not depend from claim 110, but depend from claim 104, and contain the same limitation as discussed below. Thus, the arguments with respect to claim 104 are incorporated herein, and if claim 104 is allowable, so too are claims 110-114, 117-119, 171, and 177.

Claim 110 represents the claims of this group. Claim 110, and the other claims of this group, are grouped separately because they recite an additional limitation of *generating derived* data based on said *data indicative of a first parameter and said data indicative of a second parameter of said individual*. Thus, according to this claimed embodiment, derived data must be generated from a *first and a second* parameter. (See, e.g., Table 2 in specification, which lists types of derived information, and the parameters used for deriving that information).

The Examiner cites Mault, Col. 12, lines 13-24 for anticipating this limitation. However, the cited excerpt only discloses the calculation of various exercise parameters, such as calories burned, distance covered, average speed and the like from one parameter: data from a pedometer. Mault does disclose alternative data that can be used to determine calories burned and the like, but Mault does not disclose using more than one parameter, for calculating any resultant data, for example, calories burned, distance covered or average speed. Accordingly, the rejections of claim

110, and its dependent claims 111-114 and 117-119 are improper and the claims are allowable. Claims 171 and 177 which contain the limitation discussed above are similarly allowable.

With respect to claim 177 in particular, the that claim requires communicating the data indicative of both first and second parameters to a central monitoring unit, wherein the central monitoring unit performs the calculation of quantitative status information from both parameters.[9] Mault only discloses a "remote" server, but not one that performs the claimed calculation as discussed above. Accordingly, Mault does not anticipate claim 177.

4. Claims 115 and 120

Claims 115 and 120 each depend indirectly from claims 110 and 104. If claims 110 and 104 are allowed, claims 115 and 120 are similarly allowable. Claims 115 and 120 indirectly depend from claim 110 and as such require the claimed limitation of *derived data*. As discussed above, *derived data*, according to this claimed embodiment of the invention, again requires two parameters. Claims 115 and 120 are grouped separately, however, because each recite that the derived data further comprises *data relating to calories burned* that is *generated using at least said data indicative of motion and said data indicative of heat flow*. According to claim 115, the *data indicative of heat flow* is generated by the claimed *heat flux sensor*.

Mault contains no disclosure of utilizing data indicative of heat flow along with data indicative of motion to derive calories burned. Respectfully, the Examiner errs by interpreting

[9] Claim 177 recites the term "commutating." This is a typographical error. The term is meant to be "communicating," which clearly is consistent with the disclosure and the other claims. Applicants respectfully request that the Board instruct the Examiner to either allow the Applicants to make the appropriate correction to the term, or to make the correction through an Examiner's amendment prior to allowance should the Board deem the claims allowable.

Mault's disclosure of a "temperature sensor" to read on the claimed *heat flux sensor*. As described in the specification, the claimed *heat flux sensor* is distinct from a temperature sensor in that it produces *data indicative of heat flow*, which is distinct from data indicative of an individual's temperature. (See Specification, page 7, line 10; Table 1; Table 2; page 24, line 11; Fig. 9; page 31, lines 5-9). The specification makes clear that heat flow is not an individual's skin temperature or core body temperature because the specification treats heat flow, skin temperature, and core temperature separately. (See Specification, page 24, lines 12-16, stating: "[S]kin temperature, heat flow, beat-to-beat heart variability, heart rate, pulse rate, respiration rate, core temperature, galvanic skin response ... can be used to provide indicators to the user of his or her sleep patterns over a desired time period"). As such, Mault does not anticipate claims 115 or 120 because both require the generation of data related to calories burned from the claimed *data indicative of heat flow*.

Further, none of the passages cited by the Examiner disclose the use of *data indicative of heat flow* together with *data indicative of motion* to derive calories burned. For example, Mault, Col. 12, lines 14-16 discusses determining calories burned from one parameter only, a pedometer. Mault at Col. 20., lines 7-11, discloses that, in a separate embodiment, a skin mounted heart rate monitor may also contain a temperature sensor, because such information "is useful to record within a calorie management system." Moreover, accepting, *arguendo*, the Examiner's interpretation that Mault does disclose data indicative of heat flow, Mault still does not anticipate the claim because Mault only discloses: (1) that heart rate data and temperature data are "useful to record" in a calorie management system; and (2) that a heart rate monitor of

the type described in Mault can comprise a "micro machined activity monitor," which would similarly be "useful" in a physical fitness program, cardiac rehabilitation program or the like. The mere mention that other parameters would be "useful" is not sufficient to anticipate the claimed step of deriving calories burned from data indicative of heat flow and data indicative of motion. Accordingly the rejections of claims 115 and 120 are overcome and reversal thereof is respectfully requested.

5. Claims 116 and 121

Claims 116 depends indirectly from claim 104, therefore, if claim 104 is allowed, claim 116 is allowable. Claim 121 depends indirectly from both claims 104 and 110, thus, if any of those claims are allowed, claim 121 is similarly allowable. Claims 116 and 121 are grouped separately, however, because each of claims 116 and 121 recite an additional limitation. Claims 116 and 121 recite that one of the two sensors (which are recited in claim 111) is a skin conductance sensor. To support her rejection, the Examiner cites to an embodiment in Mault that describes a "Body Fat Measurement Module," which discloses a bioimpedance sensor for determining the body fat content of an individual. (See Mault, Col. 15, lines 52-61). Applicants submit that body fat measurement sensors are not skin conductance sensors and they do not generate data indicative of the resistance of the individual's skin to electric current. Rather, body fat bioimpedance sensors which function in the manner described by Mault, analyze multiple frequencies to determine the intracellular and extra-cellular water content of the body. Body fat sensors perform this function by assuming a certain level of hydration in the individual's lean tissue. (Mault, Col. 16, lines 40-49). Such sensors are not configured to determine the resistance

of an individual's skin, even though minor skin conductivity differences may affect the measurement. (Mault, Col.15, lines 56-62). Mault's mention of the effect of skin conductivity differences is what the Examiner inappropriately seized on to support her position that Mault anticipates a skin conductance sensor. However, a thorough reading of the reference as a whole reveals that it does not disclose the claimed skin conductivity sensors that generate data indicative of the resistance of the individual's skin to electric current as claimed. Rather, Mault teaches away from such an interpretation, referencing differences in skin conductivity as inappropriate and undesirable noise that should be diminished in order to maintain the integrity of the signal. In contrast to the claimed invention, therefore, Mault discloses removing rather than generating or using data indicative of the individual's resistance to an electric current.

Accordingly, the rejection of claims 116 and 121 is overcome and reversal thereof is respectfully requested.

6. Claims 124, 125, 150-152, 172, 176, 178, 180, and 182

Claim 124, the other independent claim in this application, is similar to independent claim 104. Claim 124 is representative of this particular group of claims. Like claim 104, claim 124 recited the step of calculating quantitative status information from a first and second parameter. These claims are grouped separately, however, because claim 124 recites a different communicating step from claim 104, which is as follows:

> communicating to a recipient said calculated quantitative status information ***indicative of a suggested change in said individual's performance*** to assist said individual in the achievement of said physiological status goal.

To support the rejection of Claim 124, the Examiner again cites Mault Col. 6, line 61 to Col. 7, line 11. The rejection states that the Examiner "interprets Mault's teaching of 'the software may then prompt the user...walk or run a certain distance' to be a form of 'communicating to a recipient said quantitative status information.' " But notably, the Examiner does not even allege that Mault discloses the claimed step of communicating information *indicative of a suggested change in said individual's performance*. Therefore, it is unclear if the Examiner was even aware of the relevant claimed limitation. Respectfully, the Examiner's failure to articulate a clear rejection in this case is in contravention to the Administrative Procedure Act, 5 U.S.C. § 706(2). *See In Re Sang Su Lee* 277 F.3d 1338, 1342-44 (Fed. Cir. 2002)(stating that the Patent Office must articulate its reasons for a rejection and that the Patent Office must provide an administrative record showing the evidence supporting a rejection accompanied by the reasoning supporting the rejection.)

Regardless of the deficiency in the Examiner's rejection, Applicants submit that Mault does not disclose the claimed step of communicating to a recipient said calculated quantitative status information *indicative of a suggested change in said individual's performance* as claimed. What Mault does disclose is a system capable of reminding users to "run or walk a certain distance" based on a schedule. "The software ...prompt[s] the user to remind them that, **according to the schedule**, they should run or walk a certain distance each day." Mault, Col. 6, line 66 to Col. 7, line 1 (emphasis added). Such prompts are not *indicative of a change in said individual's performance*, as claimed. And the prompts are certainly not calculated quantitative status information from the claimed first and second parameters, wherein the first and second parameters are produced by the individual's body or the environment adjacent to the individual's

body as discussed in relation to claim 104. Rather, the prompts are simply reminders to adhere to a schedule. Accordingly, the rejection of Claim 124 is overcome and reversal thereof is respectfully requested. Claims 125, 150-152, 172, 176, 180, and 182 depend on claim 124, and as such the rejection of those claims should be similarly reversed.

With respect to claim 178 in particular, the that claim requires: communicating the data indicative of both first and second parameters to a central monitoring unit, wherein the central monitoring unit performs the calculation of quantitative status information from both parameters.[10] Mault only discloses a "remote" server, but not one that performs the claimed calculation of quantitative status information suggestive of a change from two parameters. Accordingly, Mault does not anticipate claim 178.[11]

7. Claim 126, 127, 137-139, and 142-144

Claim 126 indirectly depends from independent claim 124. Therefore, the arguments with respect to claim 124 are incorporated herein. Claim 126 is representative of this particular group, and is grouped separately from the above groups because claim 126 recites an additional limitation of generating derived data based on said data indicative of *a first parameter and data indicative of a second parameter of said individual*, wherein the first and second parameters are produced by the individual's body or the environment adjacent to the individual's body. (See

[10] Claim 177 recites the term "commutating". This is a typographical error. The term is meant to be "communicating", which clearly is consistent with the disclosure and the other claims. Applicants respectfully request that the Board instruct the Examiner to either allow the Applicants to make the appropriate correction to the term, or to make the correction via an Examiner's amendment prior to allowance should the Board deem the claims allowable.

[11] Claim 178 also recites the term "commutating". See Note 8 above.

e.g., Table 2 in specification, which lists types of derived information, and the parameters used for deriving that information).

The Examiner cites Mault, Col. 12, lines 13-24 for anticipating derived data from a first and second parameter. However, the cited excerpt discloses the determination of various exercise parameters, such as calories burned, distance covered, average speed and the like from only one parameter: pedometer data. Mault discloses alternatives for a pedometer but does not disclose using a more than one parameter, i.e., *a first and second parameter*, for calculating as calories burned, distance covered, average speed and the like. Accordingly, the rejections of claim 126, and claims 127, 137-139, and 142-144, which depend from claim 126 directly or indirectly, are overcome and reversal thereof is respectfully requested.

8. Claims 140 and 145

Claims 140 and 145 each depend indirectly on claims 124 and 126, and are therefore allowable if those claims are deemed allowable. Since each claim indirectly depends from claim 126, each claim requires the claimed limitation of *derived data*. As stated above, *derived data*, according to the claims, must result from at least two paramters, i.e, a first and a second parameter. Claims 140 and 145 are grouped separately, however, because according to claims 140 and 145, derived data comprises *data relating to calories burned* and is generated using at least *said data indicative of motion* and *said data indicative of heat flow*. The data indicative of heat flow is generated by the claimed *heat flux sensor*.

Mault contains no disclosure of the claimed heat flux sensor and Mault does not disclose utilizing data indicative of heat flow data along with motion-related data to arrive at calories

burned. Respectfully, the Examiner errs by interpreting Mault's disclosure of a "temperature sensor" to read on the claimed *heat flux sensor*. As described in the specification, the claimed *heat flux sensor* and *data indicative of heat flow* are distinct from temperature sensors. (See Specification, page 7, line 10; Table 1; Table 2; page 24, line 11; Fig. 9; page 31, lines 5-9). The specification makes clear that the data indicative of heat flow is not an individual's skin temperature or core body temperature because the specification treats heat flow, skin temperature, and core temperature separately. "[S]kin temperature, heat flow, beat-to-beat heart variability, heart rate, pulse rate, respiration rate, core temperature, galvanic skin response ... can be used to provide indicators to the user of his or her sleep patterns over a desired time period." (Specification, page 24, lines 12-16). As such, Mault does not anticipate the claimed heat flux sensor or the claimed data indicative of heat flow.

Further, Mault does not disclose the use of data indicative of heat flow along with data indicative of motion to derive calories burned. As stated above, the Mault reference contains disclosures of various (primarily single-sensor) embodiments, which are configured to be combined with PDA's. The Examiner takes bits and pieces of disclosure in disparate embodiments in an attempt to reconstruct Applicants' invention. The reconstruction fails, however, because none of the passages disclose the use of heat flow together with motion data to arrive at calories burned. Rather, Mault, Col. 12, lines 14-16 discusses determining calories burned from one parameter only: a pedometer. The remainder of the Mault reference is similarly deficient. For example, in describing an entirely different embodiment for a heart rate monitor, Mault at Col. 20., lines 7-11, discloses that a skin mounted heart-rate monitor may also

contain a temperature sensor because such information "is useful to record within a calorie management system." Again, this particular section in Mault does not include a disclosure of heat flow data. Again, accepting, *arguendo*, the Examiner's interpretation that Mault discloses data indicative of heat flow, Mault still does not anticipate the claim because Mault only discloses: (1) that heart rate data and temperature data are "useful to record" in a calorie management system; and (2) that a heart rate monitor of the type described in Mault can comprise a "micro machined activity monitor," which would similarly be "useful" in physical fitness program, cardiac rehabilitation program or the like. The mere mention that other parameters would be "useful" is not a sufficiently enabling disclosure to anticipate the claimed step of deriving calories burned from data indicative of heat flow and data indicative of motion.

Accordingly the rejections of claims 140 and 145 are overcome and reversal thereof is respectfully requested.

9. Claim 141 and 146

Claims 141 and 146 each depend indirectly on claims 124 and 126, and are therefore allowable if those claims are deemed allowable. Claims 141 and 146 are grouped separately because each require two sensors comprising *a body motion sensor* and *skin conductance sensor.* And each claim requires that the *data relating to calories burned* be derived from two parameters: (1) *data indicative of motion*; and (2) *data indicative of resistance of the individual's skin to electric current.*

To support the rejection of these claims, the Examiner utilizes improper hindsight and a strained reading of the reference to piece together components of unrelated embodiments in the Mault disclosure to arrive at the claimed invention. The Examiner cites a portion of Mault that discloses a pedometer, which is used for activity monitoring. (See Mault, Col. 11, lines 52-57; Col. 12, lines 14-16). She then cites to an embodiment in Mault that describes a "Body Fat Measurement Module," which discloses a bioimpedance sensor for determining the body fat content of an individual. (See Mault, Col. 15, lines 52-61). She then concludes that Mault discloses using data from both sensors to arrive at calories burned without any support or quotation from the reference. Again, the Examiner's reasoning is flawed.

First, as discussed above, body fat measurement sensors are not skin conductance sensors and they do not generate data indicative of the resistance of the individual's skin to electric current. Therefore, Mault cannot anticipate the claims on this account. Second, similar to the arguments above with respect to Mault's failure to disclose the use of data indicative of motion along with data indicative of heat flow to derive calories burned, Mault does not disclose the use of data indicative of motion along with *data indicative of the resistance of the individual's skin to electric current* to derive calories burned. As such, Mault does not anticipate claims 141 and 146.

Accordingly the rejections of claims 141 and 146 are overcome and reversal thereof is respectfully requested.

10. Claims 161-164

Claims 161-164 are grouped separately because each require a body motion sensor and a body potential sensor. The claims also require that calories burned be derived from *data*

indicative of motion and *data indicative of heart beats.* Claim 161 is representative of the group. As with the previously-discussed claimed embodiments involving the derivation of calories burned, the claimed invention requires that the derivation be based upon two parameters. Mault does not disclose two parameters to derive calories burned. Mault discloses other parameters as "alternative" parameters and that the use of other parameters is "useful" as discussed above, but does not teach or suggest the combination of the recited parameters, i.e., motion and heart beats, to derive calories burned. Since Mault does not disclose the use of data indicative of motion along with *data indicative of heart beats* to derive calories burned, Mault does not anticipate claims 161-164.

C. Mault in view of Brown et al., U.S. Pat. No. 5,913,310 ("Brown") fail to render claims 122 and 123 obvious under 35 U.S.C §103.

The Examiner rejected claims 122 and 123 under 35 U.S.C. §103(a) as being unpatentable over Mault in view of Brown.[12] To support the rejection, the Examiner states that Mault teaches the method as analyzed and discussed in claim 104 above. The Examiner admits that Mault does not disclose the steps of aggregating the data indicative of the first or second parameter along with the quantitative status from a plurality of individuals to create aggregate data. The Examiner, however, alleges that Brown teaches this limitation and that it would have been obvious to modify Mault to include the limitations allegedly taught by Brown, the motivation being to statistically analyze the data for use in epidemiological research. (Brown, Col. 20, lines 35-45).

[12] Brown is attached as Exhibit G for the Board's convenience.

The Examiner's conclusion that Mault teaches the method as analyzed and discussed in claim 104 is flawed for the reasons discussed above with reference to claim 104. As discussed above, Mault does not disclose each and every claimed limitation of claim 104, the claim from which claims 122 and 123 depend. Therefore, even with the additional alleged teachings of Brown, the combination of Mault and Brown does not teach all of the claim limitations. Teaching all of the claimed limitations is required to make out a *prima facie* case of obviousness. See, In re Vaeck, 947 F.2d. 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Further, the Examiner's motivation analysis is flawed. A careful reading of the cited reference will reveal that motivation is indeed lacking. Brown does not disclose generating data indicative of a physiological parameter with a wearable device and aggregating such data--let alone the aggregation of any physiological data. Brown merely discloses the aggregation of test results from children completing the disclosed continuous performance tasks battery. The performance task battery is in the form of questionnaires; no physiological data is involved. (See Brown, Col. 20, lines 29-37.) Thus, the "epidemiological research" disclosed is research done with the test results from surveys. Therefore, not only has the Examiner engaged in prohibited hindsight reconstruction of the invention, she has done so by piecing together keywords from different references without reference to the context of those keywords. Accordingly, the rejection is overcome and Applicants respectfully request withdrawal thereof.

For the reasons stated above, Applicants respectfully submit that the rejections of claims 104-127, 137-152, 161-164, 167, 171, 172, and 175-182 are overcome, and reversal thereof is respectfully requested along with a holding that each of the claims are allowable.

Respectfully submitted,

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APPENDICES

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APPENDIX OF CLAIMS

1 – 103. (Cancelled)

104. (Rejected) A method for assisting an individual to monitor, control and modify certain aspects of the individual's physiological status according to a preset physiological status goal, said individual wearing a wearable physiological monitoring device, the method comprising:

establishing said physiological status goal according to certain physiological parameters of said individual;

generating data with said wearable device, said generated data indicative of a first parameter of said individual wearing said wearable physiological monitoring device;

generating data indicative of a second parameter of said individual with at least one of said wearable device and a second device;

receiving data related to the life activities of said individual;

calculating, from said first and second parameters, quantitative status information indicative of the relative degree of achievement of said individual's performance with relation to said physiological status goal;

generating individual status information relating to the status of said individual from said life activities data; and

communicating to a recipient said calculated quantitative status information regarding said individual and said individual status information,

wherein said first and second parameters are produced by at least one of said individual's body and the environment adjacent said individual's body.

105. (Rejected) A method according to claim 104, wherein said physiological status goal comprises a plurality of categories.

106. (Rejected) A method according to claim 105, wherein said quantitative status information is determined and provided with respect to each of said categories.

107. (Rejected) A method according to claim 106, wherein said categories relate to two or more of nutrition, activity level, mind centering, sleep, and daily activities.

108. (Rejected) A method according to claim 104, wherein said communicating step comprises providing at least a portion of said quantitative status information in graphical form.

109. (Rejected) A method according to claim 104, wherein at least two sensors selected from the group consisting of physiological sensors and contextual sensors are in electrical communication with at least one of said wearable device and said second device, said sensors generating said data indicative of a first parameter and said data indicative of a second parameter of said individual.

110. (Rejected) A method according to claim 109, further comprising generating derived data based on said data indicative of a first parameter and said data indicative of a second parameter of said individual.

111. (Rejected) A method according to claim 110, further comprising the additional step of using at least said derived data to determine said quantitative status information.

112. (Rejected) A method according to claim 110, said at least two sensors being chosen from the group consisting of respiration sensors, temperature sensors, heat flux sensors, body conductance sensors, body resistance sensors, body potential sensors, brain activity sensors, blood pressure sensors, body impedance sensors, body motion sensors, oxygen consumption sensors, body chemistry sensors, body position sensors, body pressure sensors, light absorption sensors, piezoelectric sensors, electrochemical sensors, strain gauges, and optical sensors.

113. (Rejected) A method according to claim 110, said at least two sensors being two of a body motion sensors adapted to generate data indicative of motion, a skin conductance sensor adapted to generate data indicative of the resistance of said individual's skin to electric current, a heat flux sensor adapted to generate data indicative of heat flow, a body potential sensor adapted to generate data indicative of heart beats or muscle or brain activity of said individual, and a temperature sensor adapted to generate data indicative of a temperature of said individual's skin, said data indicative of a first parameter and said data indicative of a second parameter

comprising at least two of said data indicative of motion, said data indicative of resistance of said individual's skin to electric current, said data indicative of heat flow, said data indicative of heart beats or muscle or brain activity and said data indicative of a temperature of said individual's skin.

114. (Rejected) A method according to claim 110, wherein said derived data comprises data relating to at least one of activity level, sleep, nutrition, stress level and relaxation level.

115 (Rejected) A method according to claim 113, said at least two sensors being said body motion sensor and said heat flux sensor, wherein said derived data comprises data relating to calories burned and is generated using at least said data indicative of motion and said data indicative of heat flow.

116. (Rejected) A method according to claim 109, said at least two sensors comprising at least one skin conductance sensor generating data indicative of the resistance of said individual's skin to electric current.

117. (Rejected) A method according to claim 111, said at least two sensors being chosen from the group consisting of respiration sensors, temperature sensors, heat flux sensors, body conductance sensors, body resistance sensors, body potential sensors, brain activity sensors. blood pressure sensors, body impedance sensors, body motion sensors, oxygen consumption sensors, body chemistry sensors, body position sensors, body pressure sensors, light absorption sensors, piezoelectric sensors, electrochemical sensors, strain gauges, and optical sensors.

118. (Rejected) A method according to claim 111, said at least two sensors being two of a body motion sensors adapted to generate data indicative of motion, a skin conductance sensor adapted to generate data indicative of the resistance of said individual's skin to electric current, a heat flux sensor adapted to generate data indicative of heat flow, a body potential sensor adapted to generate data indicative of heart beats or muscle or brain activity of said individual, and a temperature sensor adapted to generate data indicative of a temperature of said individual's skin, said data indicative of a first parameter and said data indicative of a second parameter comprising at least two of said data indicative of motion, said data indicative of resistance of said individual's skin to electric current, said data indicative of heat flow, said data indicative of heart beats or muscle or brain activity and said data indicative of a temperature of said individual's skin.

119. (Rejected) A method according to claim 111, wherein said derived data comprises data relating to at least one of activity level, sleep, nutrition, stress level and relaxation level.

120. (Rejected) A method according to claim 118, said at least two sensors being said body motion sensor and said heat flux sensor, wherein said derived data comprises data relating to calories burned and is generated using at least said data indicative of motion and said data indicative of heat flow.

121. (Rejected) A method according to claim 118, wherein one of at least said at least two sensors further comprises said skin conductance sensor which generates data indicative of the resistance of said individual's skin to electric current.

122. (Rejected) A method according to claim 104, further comprising the step of aggregating at least one of said data indicative of a first parameter of said individual, said data indicative of a second parameter of said individual, and said quantitative status information with data collected from a plurality of individuals to create aggregate data.

123. (Rejected) A method according to claim 122, further comprising the step of creating reports based on said aggregate data.

124. (Rejected) A method for assisting an individual to monitor, control and modify certain aspects of the individual's physiological status according to a preset physiological status goal, said individual wearing a wearable physiological monitoring device, the method comprising:

establishing said physiological status goal according to certain physiological parameters of said individual;

generating data with said wearable device, said generated data indicative of a first parameter of said individual wearing said wearable physiological monitoring device;

generating data indicative of a second parameter of said individual with at least one of said wearable device and a second device;

calculating, directly from said first and second parameters, quantitative status information indicative of the relative degree of achievement of said individual's performance with relation to said physiological status goal; and

communicating to a recipient said calculated quantitative status information indicative of a suggested change in said individual's performance to assist said individual in the achievement of said physiological status goal,

wherein said first and second parameters are produced by at least one of said individual's body and the environment adjacent said individual's body.

125. (Rejected) A method according to claim 124, wherein at least two sensors selected from the group consisting of physiological sensors and contextual sensors are in electrical communication with at least one of said wearable device and said second device, said sensors generating said data indicative of a first parameter and said data indicative of a second parameter of said individual.

126. (Rejected) A method according to claim 125, further comprising generating derived data based on said data indicative of a first parameter and said data indicative of a second parameter.

127. (Rejected) A method according to claim 126, further comprising the step of using at least said derived data to determine said quantitative status data.

128-136. (Canceled)

137. (Rejected) A method according to claim 126, said at least two sensors being chosen from the group consisting of respiration sensors, temperature sensors, heat flux sensors, body conductance sensors, body resistance sensors, body potential sensors, brain activity sensors, blood pressure sensors, body impedance sensors, body motion sensors, oxygen consumption sensors, body chemistry sensors, body position sensors, body pressure sensors, light absorption sensors, piezoelectric sensors, electrochemical sensors, strain gauges, and optical sensors.

138. (Rejected) A method according to claim 126, said at least two sensors being two of a body motion sensor adapted to generate data indicative of motion, a skin conductance sensor adapted to generate data indicative of the resistance of said individual's skin to electric current, a heat flux sensor adapted to generate data indicative of heat flow, a body potential sensor adapted to generate data indicative of heart beats or muscle or brain activity of said individual, and a temperature sensor adapted to generate data indicative of a temperature of said individual's skin, said data indicative of a first parameter and said data indicative of a second parameter comprising at least two of said data indicative of motion, said data indicative of resistance of said individual's skin to electric current, said data indicative of heat flow, said data indicative of heart beats or muscle or brain activity and said data indicative of a temperature of said individual's skin.

139. (Rejected) A method according to claim 126, wherein said derived data comprises data relating to at least one of activity level, sleep, nutrition, stress level and relaxation level.

140. (Rejected) A method according to claim 138, said at least two sensors being said body motion sensor and said heat flux sensor, wherein said derived data comprises data relating to calories burned and is generated using at least said data indicative of motion and said data indicative of heat flow.

141. (Rejected) A method according to claim 138, said at least two sensors comprising a body motion sensor and skin conductance sensor, wherein said derived data comprises data relating to calories burned, wherein said data relating to calories burned is generated using at least said data indicative of motion and said data indicative of resistance of said individual's skin to electric current.

142. (Rejected) A method according to claim 127, said at least two sensors being chosen from the group consisting of respiration sensors, temperature sensors, heat flux sensors, body conductance sensors, body resistance sensors, body potential sensors, brain activity sensors, blood pressure sensors, body impedance sensors, body motion sensors, oxygen consumption sensors, body chemistry sensors, body position sensors, body pressure sensors, light absorption sensors, piezoelectric sensors, electrochemical sensors, strain gauges, and optical sensors.

143. (Rejected) A method according to claim 127, said at least two sensors being two of a body motion sensor adapted to generate data indicative of motion, a skin conductance sensor adapted to generate data indicative of the resistance of said individual's skin to electric current, a

heat flux sensor adapted to generate data indicative of heat flow, a body potential sensor adapted to generate data indicative of heart beats or muscle or brain activity of said individual, and a temperature sensor adapted to generate data indicative of a temperature of said individual's skin, said data indicative of a first parameter and said data indicative of a second parameter comprising at least two of said data indicative of motion, said data indicative of resistance of said individual's skin to electric current, said data indicative of heat flow, said data indicative of heart beats or muscle or brain activity and said data indicative of a temperature of said individual's skin.

144. (Rejected) A method according to claim 127, wherein said derived data comprises data relating to at least one of activity level, sleep, nutrition, stress level and relaxation level.

145. (Rejected) A method according to claim 143, said at least two sensors being said body motion sensor and said heat flux sensor, wherein said derived data comprises data relating to calories burned and is generated using at least said data indicative of motion and said data indicative of heat flow.

146. (Rejected) A method according to claim 143, said at least two sensors comprising said skin conductance sensor and a body motion sensor, wherein said derived data comprises data related to calories burned, and wherein said data relating to calories burned is generated using at least said data indicative of motion and said data indicative of resistance of said individual's skin to electric current.

147. * (Rejected) A method according to claim 104, said wearable physiological monitoring device being part of an armband.

148. (Rejected) A method according to claim 104, said wearable physiological monitoring device being part of a garment.

149. (Rejected) A method according to claim 104, said wearable physiological monitoring device having at least two sensors, said at least two sensors being two of a body motion sensor adapted to generate data indicative of motion, a skin conductance sensor adapted to generate data indicative of the resistance of said individual's skin to electric current, a heat flux sensor adapted to generate data indicative of heat flow, a body potential sensor adapted to generate data indicative of heart beats or muscle or brain activity of said individual, a temperature sensor adapted to generate data indicative of a temperature of said individual's skin, an impedance sensor adapted to generate data indicative of an impedance of said individual's body, and a pulse rate sensor adapted to generate data indicative of a pulse rate of said individual, said physiological monitoring device generating at least two of said data indicative of motion, said data indicative of resistance of said individual's skin to electric current, said data indicative of heat flow, said data indicative of heart beats or muscle or brain activity, said data indicative of a temperature of said individual's skin, said data indicative of impedance, and said data indicative of pulse rate when worn by said individual; said data indicative of a first parameter and said data indicative of a second parameter being generated using said at least two of said data indicative of motion, said data indicative of resistance of said individual's skin to

electric current, said data indicative of heat flow, said data indicative of heart beats or muscle or brain activity, said data indicative of a temperature of said individual's skin, said data indicative of impedance, and said data indicative of pulse rate.

150. (Rejected) A method according to claim 124, said wearable physiological monitoring device being part of an armband.

151. (Rejected) A method according to claim 124, said wearable physiological monitoring device being part of a garment.

152. (Rejected) A method according to claim 124, said wearable physiological monitoring device having at least two sensors, said at least two sensors being two of a body motion sensor adapted to generate data indicative of motion, a skin conductance sensor adapted to generate data indicative of the resistance of said individual's skin to electric current, a heat flux sensor adapted to generate data indicative of heat flow, a body potential sensor adapted to generate data indicative of heart beats or muscle or brain activity of said individual, a temperature sensor adapted to generate data indicative of a temperature of said individual's skin, an impedance sensor adapted to generate data indicative of an impedance of said individual's body, and a pulse rate sensor adapted to generate data indicative of a pulse rate of said individual, said physiological monitoring device generating at least two of said data indicative of motion, said data indicative of resistance of said individual's skin to electric current, said data indicative of heat flow, said data indicative of heart beats or muscle or brain activity, said data

indicative of a temperature of said individual's skin, said data indicative of impedance, and said data indicative of pulse rate when worn by said individual; said data indicative of a first parameter and said data indicative of a second parameter being generated using said at least two of said data indicative of motion, said data indicative of resistance of said individual's skin to electric current, said data indicative of heat flow, said data indicative of heart beats or muscle or brain activity, said data indicative of a temperature of said individual's skin, said data indicative of impedance, and said data indicative of pulse rate.

153-160. (Cancelled)

161. (Rejected) A method according to claim 113, said at least two sensors being said body motion sensor and said body potential sensor, wherein said derived data comprises data relating to calories burned and is generated using at least said data indicative of motion and said data indicative of heart beats.

162. (Rejected) A method according to claim 118, said at least two sensors being said body motion sensor and said body potential sensor, wherein said derived data comprises data relating to calories burned and is generated using at least said data indicative of motion and said data indicative of heart beats.

163. (Rejected) A method according to claim 138, said at least two sensors being said body motion sensor and said body potential sensor, wherein said derived data comprises data

relating to calories burned and is generated using at least said data indicative of motion and said data indicative of heart beats.

164. (Rejected) A method according to claim 143, said at least two sensors being said body motion sensor and said body potential sensor, wherein said derived data comprises data relating to calories burned and is generated using at least said data indicative of motion and said data indicative of heart beats.

165- 166. (Cancelled)

167. (Rejected) A method according to claim 104, further comprising receiving sensor data from one or more sensor devices, said one or more sensor devices measuring said sensor data from the individual, and using said sensor data in addition to said data indicative of a first parameter and said data indicative of a second parameter to calculate said quantitative status information.

168- 170. (Cancelled)

171. (Rejected) A method according to claim 104, further comprising the step of generating derived data from at least one of said data indicative of a first parameter and said data indicative of a second parameter, wherein said quantitative status information indicative of

the relative degree of achievement of said individual's performance with relation to said physiological status goal is calculated from at least said derived data.

172. (Rejected) A method according to claim 124, further comprising the step of generating derived data from at least one of said data indicative a first parameter and said data indicative of a second parameter, wherein said quantitative status information indicative of the relative degree of achievement of said individual's performance with relation to said physiological status goal is calculated from at least said derived data.

173-174. (Cancelled)

175. (Rejected) A method according to Claim 104 wherein said step of calculating, from said first and second parameters, quantitative status information indicative of the relative degree of achievement of said individual's performance with relation to said physiological status goal further comprises using said life activities data in said calculation.

176. (Rejected) A method according to Claim 124 further comprising the step of receiving data related to said individual's life activities, and wherein said step of calculating, from said first and second parameters, quantitative status information indicative of the relative degree of achievement of said individual's performance with relation to said physiological status goal further comprises using said life activities data in said calculation.

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177. (Rejected) A method according to Claim 104 further comprising the step of commutating said data indicative of said first and second parameters to a central monitoring unit, and wherein said step of calculating, from said first and second parameters, quantitative status information indicative of the relative degree of achievement of said individual's performance with relation to said physiological status goal is performed by said central monitoring unit.

178. (Rejected) A method according to Claim 124 further comprising the step of commutating said data indicative of said first and second parameters to a central monitoring unit, and wherein said step of calculating, from said first and second parameters, quantitative status information indicative of the relative degree of achievement of said individual's performance with relation to said physiological status goal is performed by said central monitoring unit.

179. (Rejected) A method according to claim 104, said data indicative of a first parameter and said data indicative of a second parameter comprising at least two of data indicative of resistance of said individual's skin to electric current, data indicative of heat flow of said individual, data indicative said individual's brain activity, data indicative of a temperature of said individual's skin, said data indicative of impedance of said individual, data indicative of said individual's respiration, data indicative of said individual's body conductance, data indicative of said individual's body resistance, data indicative of said individual's body potential, data indicative of said individual's blood pressure, data indicative of said individual's oxygen consumption, data indicative of said individual's body chemistry sensors, and indicative of said individual's body position sensors.

180. (Rejected) A method according to claim 124, said data indicative of a first parameter and said data indicative of a second parameter comprising at least two of data indicative of resistance of said individual's skin to electric current, data indicative of heat flow of